NCore Final Preparation Checklist

A. NCORE SITE SPECIFICS

SITE NAME	SITE AQS

	Item	Criteria	Status
1	Does Site meet siting criteria?	Appendix D & E.	
2	Has EPA Region visited site in past 3 years?		
3	Has OAQPS HQ sent Site approval letter?	Letter from Richard Wayland, Director AQAD - EPA approving site location.	
4	If Site is leveraged with other Networks (e.g. IMPROVE) are measurement responsibilities clearly delineated?	If separate monitoring programs support different suites of measurements, has documentation been prepared that clearly define responsibilities?	
5	Met tower in place?	In most cases the met tower should be 10 meters off the ground or as high as local siting constraints allow, up to 10 m, when on top of a building.	
6	Is NCore Information correct? See website http://ncore.sonomatechdata.com	Email edits to David Shelow at: shelow.david@epa.gov	
7	Station Coordinates in Decimal degrees	See "populating site standard coordinates" 8/27/07 at http://www.epa.gov/ttn/airs/airsaqs/m emos	
8	For EPA dedicated funds on equipment, have purchases been completed. If not, explain status?		
9	Are all measurements installed and operating?		
10	Will Site begin measurements by 1/1/11?	If no, when do you plan on beginning and cause for delay.	
11	Are measurements being reported to AQS?		
12	Are measurements being reported to AIRNow?		
13			
14			

B. REQUIRED PARAMETER/METHODOLOGICAL EVALUATION

	Parameter	Parameter Code	Method Code	Instrument Type model #	Installation/Operating Date	Notes
1	Ozone (O ₃)	44201				Year-round operation (not seasonal)
2	Sulfur dioxide (SO ₂)	42401				High sensitivity
3	Carbon monoxide (CO)	42101				High sensitivity
4	Reactive oxides of nitrogen (NO _y)	42600				High sensitivity External converter mounted at 10m
5	Nitric Oxide (NO)	42601				High sensitivity, determined using NOy instrument
6	PM _{2.5} mass	88101				At least 1-in-3 day FRM/FEM integrated
7	PM _{2.5} continuous	88101 or 88502				Suitable for public reporting of AQI (i.e., reports to AQS as 88101 or 88502)
8	PM _{2.5} speciation	88XXX series				1-in-3 day (Met One & URG 3000N samplers) or IMPROVE
9	PM _{10-2.5} mass	86101				Integrated samplers (FRM difference or dichot) or continuous monitor

	D .	Parameter	Method	Instrument Type	Installation/Operating	Notes
	Parameter	Code	Code	model #	Date	
10	Wind speed – Resultant	61103				At 10 m.
11	Wind direction - Resultant	61104				At 10 m.
12	Ambient temperature	62101				Nominally at 2 m. Where sensor is integrated in a package with WS, WD, 10 m. may apply.
13	Relative humidity	62201				Nominally at 2 m. Where sensor is integrated in a package with WS, WD, 10 m. may apply.
14	Optional – Vertical wind speed, solar radiation, precipitation, barometric pressure, delta-T for 2-10m.					
15	Pb (lead) - Required at NCore stations in CBSA's over 500,000 people, some flexibility on siting may apply.	85129 Lead PM ₁₀ LC FRM/FEM; or 14129 Lead TSP LC FRM/FEM		Generally, low-volume PM_{10} samplers will be used; if $> 50\%$ of the standard, then a TSP sampler is used.	To begin 12 months from date of publication in CFR (~ late Dec, 2010)	

C. SUPPORTING EQUIPMENT EVALUATION

	Item	Criteria	Status
1	Calibrator (field)	Suitable for trace-level dilutions, see Appendix A audit concentrations. Capable of automated QC checks. Internal O ₃ generator – photometer preferred.	
2	Calibrator (lab or field)	Suitable for generation of MDL-level concentrations	
3	Zero Air Source	Compliant with TAD recommendations. Ultrapure air cylinder recommended for occasional comparison to zero air source. Capacity for 20+ LPM of dilution air.	
4	Data acquisition system	Digital-capable system	
5	Gas cylinder standards	Suitable for trace-level dilutions, see Appendix A audit concentrations, EPA Protocol certifications. Special low-level standards needed for MDL concentrations (CO, SO ₂ , NOy)	
6	Meteorological calibration devices	Provide NIST traceability of required meteorological parameters.	
7	Sampling manifold & sampling manifold flow rate	Per Appendix E. Residence time <20 seconds, only glass or Teflon materials, probe and monitor inlets acceptable heights.	
8	Auditing equipment	Independent calibrator, zero air source and gas standards compatible with trace level specifications. Independent meteorological and flow standards.	

D. AQS REPORTING

	Item	Criteria	Status	Next Steps
1	AQS Metadata fields updated (AMP 255)			
2	Reporting Precision and Accuracy data to AQS			
3	PM Measurements set to "local Conditions" not STP			